The Human Services Workforce Initiative

MULTIPLE WORKFORCES

Changing the Conversation about Workforce Development

Getting from Inputs to Outcomes





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A Report Submitted to Cornerstones for Kids by
The Harvard Family Research Project

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Harvard Graduate School of Education

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We thank Cornerstones for Kids for their support but acknowledge that the findings and conclusions presented in this report are those of the authors alone and do not necessarily reflect the opinions of Cornerstones for Kids.

Cornerstones for Kids Introduction

The Human Services Workforce Initiative (HSWI) is focused on the frontline workers serving vulnerable children and families. HSWI's premise is that human services matter. Delivered well, they can, and do, positively impact the lives of vulnerable children and families, often at critical points in their lives.

We believe that the quality of the frontline worker influences the effectiveness of services they deliver to children and families. If workers are well-trained and supported, have access to the resources that they need, possess a reasonable workload, and are valued by their employers, it follows that they will be able to effectively perform their jobs. If, however, they are as vulnerable as the children and families that they serve, they will be ineffective in improving outcomes for children and families.

Unfortunately, all indications today are that our frontline human services workforce is struggling. In some instances poor compensation contributes to excessive turnover; in others an unreasonable workload and endless paperwork render otherwise capable staff ineffective; and keeping morale up is difficult in the human services fields. It is remarkable that so many human services professionals stick to it, year after year.

HSWI's mission is to work with others to raise the visibility of, and sense of urgency about, workforce issues. Through a series of publications and other communications efforts we hope to

- Call greater attention to workforce issues
- Help to describe and define the status of the human services workforce
- Disseminate data on current conditions
- Highlight best and promising practices
- Suggest systemic and policy actions that can make a deep, long-term difference

In this report the Harvard Family Research Project looks within and across four human service sectors—early childhood, child welfare, juvenile justice, and youth development— along with public school education, to determine what research and evaluation reveal about the ways investments in the workforce lead to better child and youth outcomes. The review of the empirical research resulted in a preliminary framework, or logic model, describing how workforce elements could lead to improved outcomes. Based on the review of existing research and an overview of promising new research and development efforts, the authors make specific recommendations for future research and evaluation that should stimulate broader discussion within and across the four sectors.

Additional information on the human services workforce, and on HSWI, is available at www.cornerstones4kids.org.

Cornerstones for Kids
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Introduction

Now, more than ever, human service leaders, managers, and workers are under pressure to show that the services they provide improve outcomes for the children they serve. Public and private funders urge that they become results-oriented and expect them to be accountable for what they promise to achieve. In the human services, as in K to 12 education, all recognize that the ability to deliver outcomes is heavily dependent on the quality and capacity of the workforce and the pre- and in-service training, professional development, and workplace supports that the workforce receives. As a result, human service leaders, managers, and frontline workers are all struggling to determine how to use their resources more strategically to support the workforce in ways that improve child outcomes. They are increasingly asking for research-based information about what training and other supports lead to a sustainable workforce's employing effective practices that yield better child and youth outcomes. Finally, those who provide workforce and professional development and training services are under pressure to demonstrate their value-added in terms of improved practice and outcomes. So they, too, are asking for research-based information and evaluation approaches that help them determine which workforce and professional development approaches work.

To address this urgent need, Cornerstones for Kids asked the Harvard Family Research Project to look within and across four human service sectors—early childhood, child welfare, juvenile justice, and youth development—to determine what research and evaluation tell us about the ways investments in the workforce lead to better child and youth outcomes. Our review of the empirical research resulted in a preliminary framework, or logic model, in which to array the research, and then in an assessment of what is currently known about how various workforce investments are related to better outcomes.

Our assessment is that given the large amounts spent on training and other supports, there is remarkably little research and evaluation that examines if and how various workforce investments and capacity-building efforts actually affect outcomes. However, we also found and describe a number of innovative research and demonstration efforts now underway that provide promising strategies and approaches to strengthening the workforce in order to demonstrably improve outcomes (HFRP, 2005/06).

We believe that it is critically important that human service leaders and providers, and those who provide workforce and professional development services, as well as researchers and evaluators, take part not only in setting the research and evaluation agenda but also in interpreting and using the resulting knowledge in an ongoing way in order to strengthen the capacity of the four human service sectors to track and improve outcomes. Therefore, it is our hope that our preliminary framework describing how workforce elements could lead to improved outcomes, our review of the existing research and overview of promising new research and development efforts in conjunction with this framework, and our recommendations for future research and evaluation will stimulate this broader discussion within and across the four human service sectors.

Our preliminary review and synthesis of the research across the human service sectors, supplemented by a scan of innovative new research on the public school teaching workforce, quickly led us to the necessity of developing an ecological framework, or logic model, in

which to array the cutting-edge new empirical work. This framework conceptualizes what the linkages and pathways between the workforce and outcomes look like in light of completed and ongoing research. In this model, professional staff development is one—but by no means the only—input that contributes to the larger goal of professional workforce development. The framework incorporates an array of individual, organizational, and policy inputs that the most recent empirical work suggests influence the sustainability of the workforce and its capacity to practice in ways that ultimately lead to positive child and youth outcomes.

Thomas R. Guskey, a leading evaluator of professional development, also recently underscored the importance of ecological frameworks or models and of further specifying them into testable theories of change. Evaluating a training program for educators, Guskey found that while it was well implemented from a training perspective, practice and outcomes did not change. Nothing in the model explained why, but further examination of the programs showed that the educators worked in organizations that did not support the changes that their training showed were necessary. In order to bring in a more ecological perspective, Guskey added a new box in the middle of his model for organizational support and change in order to examine the organizational factors influencing implementation of new practices (Kreider, 2005/6).

Similarly, new educational research on how to improve teaching is increasingly focusing not only on pre- or in-service teacher preparation, but also on the working conditions that support improved practice, including school leadership, ongoing professional development, mentoring, and facilities and resources, as well as policy supports such as improved remuneration (Berry and Darling-Hammond *et al.*, Center for Teaching Quality, 2006; Boyd *et al.*, Teacher Policy Research Center, 2005; Hirsch, North Carolina Teacher Working Conditions Initiative, 2005). As this report suggests, there would be much benefit in fostering a cross-sector conversation about this new empirical work and its implications both for workforce development and for strategic new research initiatives.

> Policymakers at every level of government and the public understand that few issues are more important than improving the performance of America's K-12 students, especially those in urban, low-performing schools. Increasingly research supports common sense in identifying teachers as the most important contributor to student outcomes. Surprisingly, there is virtually no systematic, methodologically sound research that indicates the attributes of teacher preparation programs and pathways into teaching that improve student outcomes.
>
> - Teacher Pathways Project, 2005

Road Map of the Report

After a brief review of the workforce challenges facing the human services workforce and a short discussion of our review methodology, we present our preliminary framework or logic model for how an array of workforce inputs are thought to lead to a series of short-, intermediate-, and longer-term outcomes, and finally to the ultimate goal of better child and youth outcomes. The logic model is preliminary because, as more research is done and more pathways or theories of change across the model are specified and tested, the framework will be much better elaborated and will, probably, change as a consequence.

We then report what we learned about the current research on how workforce inputs are linked to outcomes within and across sectors through the process of mapping this research onto our framework. Our findings show that we know relatively little from empirical research and evaluation, that the four sectors are at different stages with respect to the extent and complexity of their workforce research, and that very few studies have used rigorous experimental or quasi-experimental or longitudinal research designs. Researchers in early childhood education and child welfare are testing more complex models than those in juvenile justice and youth development, and this affords immediate opportunities for cross-sector conversation and learning.

While there are major limitations on what current research tells us about if and how different workforce investments lead to better outcomes, we briefly describe the state of the art in each sector and note seminal studies that point to some promising new approaches for intervention and evaluation.

We describe the three most common patterns of inquiry and seven specific pathways across the model, which emerge when the existing research is mapped onto the framework.

We then discuss the implications for workforce development initiatives and research.

The report concludes with recommendations for within- and cross-sector conversation about crafting research to better understand how to support the human services workforce in achieving its goals for positive child and youth outcomes.

Evaluation requires good design

In 1999 . . . the National Staff Development Council (NSDC) launched a 2-year initiative to find ways to measure the impact of professional learning on teacher behavior and student learning. [NSDC] discovered that the major problem with evaluating professional development lay not in evaluation but in the design of professional development. Educators wrongly believed that one-shot professional development sessions would transform not only teacher classroom behavior but also student learning. If one-shot sessions do not work, what does it take to change teacher classroom behavior and student learning? . . . It almost always takes more than just a single session. Ongoing sessions of learning, collaboration, and application, accompanied by school- and classroom-based support, over an ample time period, are necessary to incorporate new behaviors fully into a teacher's repertoire. If the design of professional development is sufficiently strong and long enough to promote deep changes, then and only then it will be possible to measure properly the impact of professional development on student learning.

- Killion, 2005/06

Common Workforce Issues and Challenges across the Four Sectors

Research on the human service workforce shows that there are serious issues potentially affecting workforce stability and performance that must be considered in building the preliminary framework that connects workforce inputs to better child and youth outcomes. These data suggest that the frontline human service workforce is at risk of burnout, high turnover and poor performance. A recent random sample survey of over 1,200 frontline child care, child welfare, employment and training, juvenile justice, and youth service workers revealed that over 75 percent described their work as frustrating, 51 percent felt unappreciated, and 42 percent estimated that one out of every ten of their coworkers was doing his or her job well (Light, 2003). We review this research briefly below for its implications for the framework. We recognize that there are important differences among the four sectors of early childhood, child welfare, juvenile justice, and youth development with respect to a number of factors, including education and training requirements, professionalization, public or private employment, compensation, and job security. But the sectors also have a common set of challenges that should be considered in efforts to specify and understand the links between the workforce and outcomes.

An interrelated set of individual and organizational issues—including poor or absent training and advanced education and inadequate compensation and career advancement opportunities—contribute to what has been described as a state of crisis in the human services workforce (Annie E. Casey Foundation, 2003). This suggests the importance of looking not just at individual training or professional development as the means to workforce improvement, but also at the organizational and policy factors that influence workforce stability, quality, and practice. Surveys of what frontline workers want to improve their work lives and performance similarly reinforce the need for such an approach.

Data on why workers enter the human service professions highlight a desire to help children and families. A survey of the human services workforce found an overwhelmingly large percentage of workers who were committed to helping people and described their jobs as “caring” and “helpful” (Light, 2003). Commitment to the child welfare profession is usually associated with worker retention (Zlotnik, DePanfilis, Daining, and Lane, 2005). Similarly, a survey of 3000 afterschool workers found 74 percent of workers reported that they stay in the field because they have an opportunity to make a difference (National AfterSchool Association, 2006).

We face a paradox, then, in several of these sectors: *Job satisfaction **and** high turnover* (National AfterSchool Association, 2006; National Council on Crime and Delinquency, 2006; American Public Human Services Association, 2005). This paradox suggests that a complex set of factors influences worker retention and performance.

Recent data on the staff turnover rates of frontline workers in the four human service sectors examined in our review show that workforce stability is a huge challenge for each sector. The rate of turnover ranges between 22 and 40 percent. In the afterschool field, 40 percent of youth workers have been in the afterschool field for less than three years, with 12 percent in the field for less than one year (National AfterSchool Association, 2006). The American Correctional Association found that 82 percent of juvenile correctional administrators reported it was extremely difficult to recruit correctional officers (Alarcon, 2002), and a later 2004 survey reported that 67 percent of administrators found it difficult to retain them

(Bureau of Labor Statistics, 2006). A survey of 136 former juvenile justice employees reported that 71 percent liked their former job but left because of professional and day-to-day job issues (National Council on Crime and Delinquency, 2006).

Similarly high turnover rates characterize the child welfare system. The average turnover rate varies from 12 percent among supervisors to 22 percent among child protective workers (American Public Human Services Association, 2005). However, there is much variation among states; Georgia, for example, has annual employee turnover of 44 percent (Ellet, Ellett and Rugutt, 2003). Although turnover is high, a survey 161 former child welfare workers found that 70 percent of child welfare workers liked their jobs; they left because of various organizational conditions (National Council on Crime and Delinquency, 2006).

Highly trained early childhood staff were found to be more likely to leave their jobs if they earned low wages, had lower degrees, and were working in settings with high turnover of qualified staff. The turnover rate in early childhood is notoriously high, with an average annual turnover rate of 30 percent, two times higher than the rate for elementary school teachers (Bellm *et al*., 2002).

These data, as well as data (below) on how compensation and advancement opportunities affect turnover, suggest the importance of examining how workforce policies affect workforce stability and how this in turn affects organizational performance and outcomes. Across the four sectors, workers perceive that their work has little value and that they get little recognition for what they do. This is evident in the compensation disparities that exist in comparison to other human service professions, such as education and nursing. Workers in these four sectors earn salaries lower than in almost every other profession. And in most cases, salaries are not consistent with level of education or experience as they are in most other professions.

The National AfterSchool Association (2006) survey found that the primary reason workers leave the afterschool workforce is better wages outside this field. Similarly, the National Council on Crime and Delinquency (2006) reported that one in three juvenile justice workers who left say that they would have stayed if they had received a higher salary. A landmark study of turnover in child care found that of teachers who left their jobs, half left the field completely and earned higher wages than those who stayed in the field (Whitebook *et al*., 2001). Lack of opportunities for advancement is also a big issue for workers. In the afterschool program workforce, one of the top worker priorities was more opportunities for advancement. In the other three sectors the lack of opportunity for advancement is given as a primary reason for leaving the field (U.S. GAO, 2003).

Research on retention also suggests that there is a range of organizational factors that influence worker decisions about whether to stay or leave. The research suggests that many human service workers leave—or stay—because of their perceptions of organizational support. Child welfare researchers have done some of the most advanced work examining how organizational factors influence retention. For example, child welfare organizations that are committed to their mission and

Factors that Affect Retention

- Wages and compensation
- Manageable workloads
- Opportunity for Advancement
- Medical insurance
- Decision-making authority
- Quality leadership
- Supportive agencies
- Job satisfaction

that value employees, offer support, and make workloads manageable, can positively influence worker retention (Zlotnik, DePanfilis, Daining and McDermott Lane, 2005). On the other hand, in an unsupportive agency environment, child welfare case workers experience burnout and feel demoralized and helpless (National Council on Crime and Delinquency, 2006). Although turnover in child welfare workers is high, a recent survey of former child welfare workers found that 70 percent liked their jobs but that they left because of a range of organizational conditions (National Council on Crime and Delinquency, 2006).

Survey data about the afterschool and juvenile justice workforces also suggest that organizational structures and processes are important in retention decisions. A National AfterSchool Association survey found that although the primary reason workers leave the afterschool workforce is better wages outside this field, the top three retention priorities are opportunities for advancement, medical insurance, and decision-making power (2006). The National Council on Crime and Delinquency reported that while one in three juvenile justice workers who left would have stayed if they had a higher salary, salary was not the sole deciding factor (2006). These workers also cited lack of opportunity for advancement and lack of quality agency leadership.

Given this picture of a workforce under stress with high turnover, it is important to examine what frontline workers suggest they want to support their professional development, advancement, and retention—all of which arguably influence their day-to-day practice and performance and, ultimately, the outcomes of their work. Survey data suggest they would like (1) professional development experiences that are time- and cost-efficient as well as engaging and meaningful; (2) workplaces that support and promote their professional growth; and (3) workforce policies that contribute toward fair and equitable compensation and worker retention.

This view of the challenges facing the human services workforce and of what workers say they need to stay and to practice effectively, reinforces the importance of developing frameworks, theories of change, and related research and development initiatives that examine and test not just individual worker characteristics and supports, such as education, training, and professional development, but also organizational characteristics and processes, such as supervision, leadership, and access to and use of performance data, as well as policy factors, such as compensation, career ladders, and accreditation and certification standards. As the next section will indicate, leading edge researchers are doing just this and are beginning to develop a better sense of which workforce supports lead to better outcomes.

The Review Method and Process

We began our cross-sector review by assembling a team with expertise on workforce issues and research in each of the four sectors. We then developed our review process to deepen our sector-specific knowledge and leverage it to get a cross-sector understanding of the different patterns of relationships between workforce development inputs and outcomes. As a first step, we developed a draft framework, or logic model, that would serve as our guide for organizing and arraying the research within and across each of the sectors. We then adapted a literature review methodology, the meta-narrative review, created by a group of health care researchers in the United Kingdom to manage reviews with a massive literature base. This method focuses on selectivity rather than comprehensiveness and prioritizes

primary studies that influence the development of successive ones. In the words of its developers, this method enables a broad base of literature to be examined, thus "'illuminating the problem and raising areas to consider' rather than 'providing the definitive answers'" (Greenhalgh, *et al*., 2004, 612).

Based on this methodology, we focused on finding the recent primary and seminal studies in each sector, looking particularly for those that connected workforce inputs to outcomes across the framework. We simultaneously conducted a series of key informant interviews with experts in each sector in order to identify key research, to get their perspectives on our emerging ecological framework as a way to represent the state of understanding in their sector, and to get their insights into promising new directions for workforce development and research. Our review is not meant to be exhaustive but to model and represent the state-of-the art of understanding of how different workforce inputs do and could affect child and youth outcomes.

Team members mapped the research in their sector onto the model to get a profile of the status of the research base and related findings as a step toward the ultimate cross-sector model and analysis. Through a series of in-person meetings, the review team developed a more nuanced model; uncovered both common and differing patterns of research across the sectors; discovered the strengths and limitations of the research base; and developed a set of recommendations and "best bets" for future research on workforce development and outcomes.

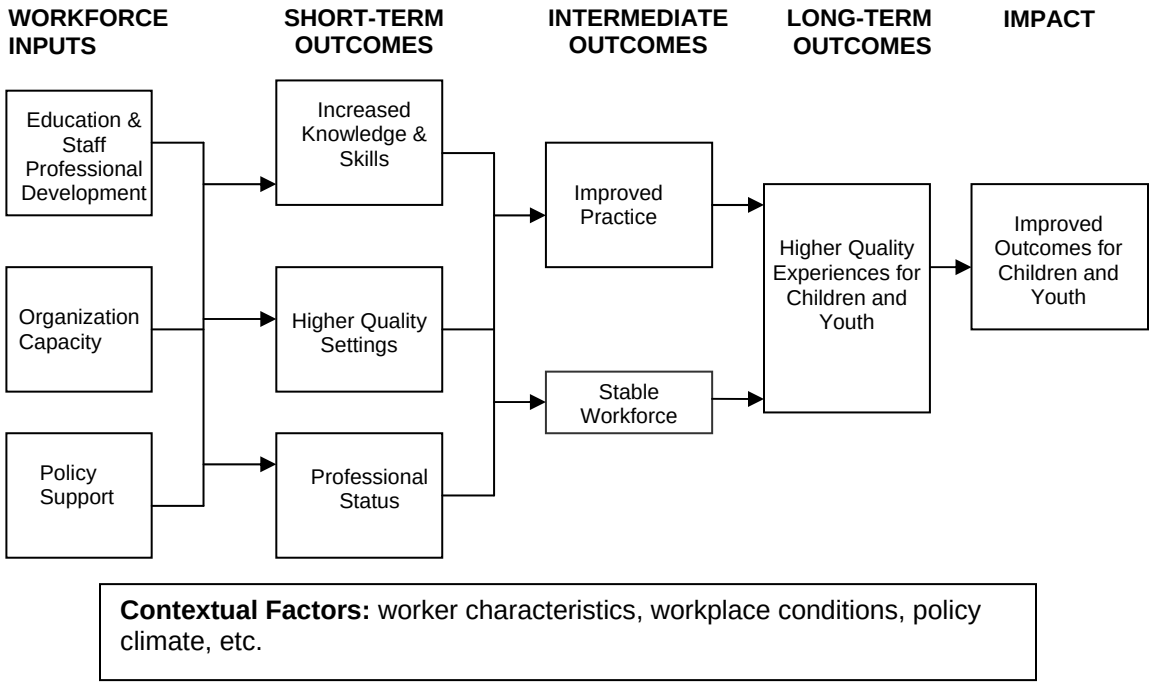
The Research and Theory-Driven Model

Like many who have examined workforce development, our early ideas about workforce development assumed that worker performance, which in turn affects child and youth outcomes, is a function of individual knowledge, skills, and experience. However, based on our knowledge of the sectors, as well as new research on teaching, we knew there were at least two other key inputs in addition to professional development, as well as a set of inter-related short, intermediate and longer- term outcomes prior to the final impact on children and youth. The three important categories of workforce inputs are:

- ⇒ *Education and professional staff development*: pre-and in-service training, workshops, and "in situ" coaching and mentoring
- ⇒ *Organizational supports*: an organizational mindset that values program improvement; administrators who support training and advocate for better compensation and conditions; adequate and supportive supervision; shared decision-making; and a strong performance management structure
- ⇒ *Policy supports*: quality ratings, accreditation standards, certification, and career ladders

Our early mapping of the most recent research and evaluations, especially in the early childhood and child welfare sectors, helped further delineate the model by specifying how these inputs result in short-, intermediate-, and long-term outcomes that ultimately result in impacts on children and youth. Figure 1 illustrates the model we used to array research across sectors and make our recommendations about workforce development research gaps and opportunities. As the arrows across the bottom of the model indicate, in each of the human service sectors, characteristics of the workforce shape workforce inputs and outcomes.

FIGURE 1: Logic Model to Illustrate How Workforce Inputs Affect Child Outcomes



Mapping the research from each sector onto this model enabled us to see which parts or relationships researchers and evaluators are examining and whether or not there is an empirical body of work connecting inputs and/or outcomes to impacts on children and youth.

It also helped to make more explicit the often-implicit ideas or theories in the research studies about how inputs might connect to outcomes and ultimate child and youth impact. So, for example, some studies make a link between professional staff development and improved practice and then leave readers to make the leap of faith that improved practice will lead to better child outcomes. Others make the assumption that if policy supports, such as better wages, can and do improve worker retention, then child outcomes will improve as a result of a more stable workforce.

The Status and Limitations of the Research in the Four Sectors

Arraying the current seminal research and evaluation studies onto the logic model shows the limitations of the current research base for addressing questions about how human service workforce interventions lead to better outcomes for children and youth. Overall, as we looked within and across the sectors we found:

⇒ *Little is known about the direct relationship between workforce inputs* (the boxes on the far left of the framework model) *and child and youth outcomes* (the box on the far right of the model). Most workforce development research instead focuses on the boxes in the middle, examining such outcomes as increased knowledge and skills, improved practice, and program quality. There are a few studies under way in the early childhood sector that will directly connect inputs to child and youth outcomes.

⇒ *Overall, no single workforce development study addresses a comprehensive array of short-, intermediate-, and long-term outcomes*. In fact, the workforce research in some sectors such as child welfare and juvenile justice tends to focus on a narrow range of outcomes, specifically recruitment and retention. By contrast, research about the early childhood workforce covers several outcomes areas such as educational qualifications, type of training, compensation, and quality assessment—but not within a single study. Several pioneering studies in early childhood and child welfare examine connections among workforce inputs, and short- and intermediate-term outcomes, including improved practice. Research about the youth development workforce is just getting under way, with recent investments in identifying the workforce, understanding credentialing, and a few studies on specific workforce inputs and their relationship to short-term outcomes.

⇒ *The quality of the research on workforce development varies within and across sectors.* Research on the early childhood workforce is the most sophisticated in terms of design and methodologies, with child welfare, juvenile justice, and youth development following in with random assignment order of rigor. There are no completed randomly assigned experimental studies that specifically address how improving the workforce contributes to impacts on children and youth (early childhood has some studies in progress, but findings are not yet available).

⇒ *The research and analytic methods used in studies of the impact of workforce development on outcomes varies considerably within and across sectors*, and there is no consistency in definitions and measures. A review of effective outcome-driven nonprofit organizations by Public/Private Ventures confirms the lack of strong evidence about workforce development. The P/PV report notes that in the nonprofit world, continuous improvement has commonly been associated with the need to satisfy funders' requests for outcomes in order to sustain program funding. In addition to "telling good stories" about success, the culture now expects more and believes that more is best when it involves staff in measuring impact on actual performance. This promising approach to continuous measurement, with feedback to the provider to enable improved practice, is also being tested in education (Berry and Darling-Hammond *et al.*, Center for Teaching Quality, 2006: Boyd *et al.*, Teacher Policy Research Center, 2005; Hirsch, North Carolina Teacher Working Conditions Initiative, 2005; Boudett, City and Murnane, 2005). Though less common than it

should be, using data to question what is working and to try new approaches has led staff in some human service organizations to be more effective (Miles, 2006).

⇒ *Researchers, including ourselves, studying human services have concluded that conceptual models to guide research are virtually non-existent.* In their review of the role of organizational variables in predicting service effectiveness, Yoo and Brooks (2005) assert that absent a conceptual model it is difficult to assess the shared meaning of a set of studies as a body of knowledge. Indeed, not only is there a lack of theory guiding the research, there is a similar lack of theory guiding the interventions themselves.

Sector at a Glance: The State of Early Childhood Workforce Research

Early childhood has been called a "patchwork quilt" of services and programs (Barnett, 2005), and its overall professional development system is equally as fragmented. The evidence base on the workforce varies in large measure depending on what teachers and what setting are being examined: there are fewer studies of home-based child care, a richer literature on center-based child care, and an increasing number of studies on pre-K programs. Various methodologies and designs have been employed, including surveys to capture demographic information about the workforce; systematic reviews of the literature on workforce development; evaluations of particular types and delivery methods of professional staff development; evaluations of the effects of organizational supports in the form of increased compensation, scholarships, and subsidies; practice-based research on workforce development in the context of school readiness, quality child care, Head Start, and preschool; intervention studies of demonstration and pilot programs that include a workforce component; and experimental research to assess the impact of workforce development and child-related outcomes. However, it is difficult to find strong experimental studies and even harder to find any that prove a direct causal link between the quality of the professional workforce and child outcomes. The questions being asked about professional development are much more specific and precise than the existing research (Martinez-Beck and Zaslow, 2006).

Sector at a Glance: The State of Child Welfare Workforce Research

Like early childhood, research in child welfare consists of a patchwork of studies that examine workforce development in relation to recruitment and retention issues. These studies consist of surveys, a systematic review, performance monitoring reports, and evaluations of training and professional development. The latter largely focus on the federal Title IV-E program. There are no studies that can establish a direct causal link between the inputs of the model—professional development, organizational factors and policy—and child outcomes. However, there are some examples of solid research on the relationships of organizational setting and workforce stability and service quality. The research spearheaded by Glisson and colleagues at the University of Tennessee (2006) uses a true experimental design to test how an intervention can affect worker turnover, organizational climate, and culture in child welfare and juvenile justice systems. Yoo and Brooks (2005) also developed a multilevel model of the relationship of organizational context in a child welfare intervention and child outcomes.

Sector at a Glance: The State of Juvenile Justice Workforce Research

The evidence base linking the juvenile justice workforce with youth outcomes is limited and incomplete. To date, there are no studies directly linking workforce development and youth outcomes, although some studies make partial linkages. For the most part, the research in juvenile justice consists of surveys of workers and administrators, descriptive analyses of jurisdictions and programs, and evaluations of intervention models. Most of the research conducted in juvenile justice examines the effects of specific interventions on youth outcomes; little examines the role of workforce inputs. Almost no experimental or longitudinal research exists in this sector.

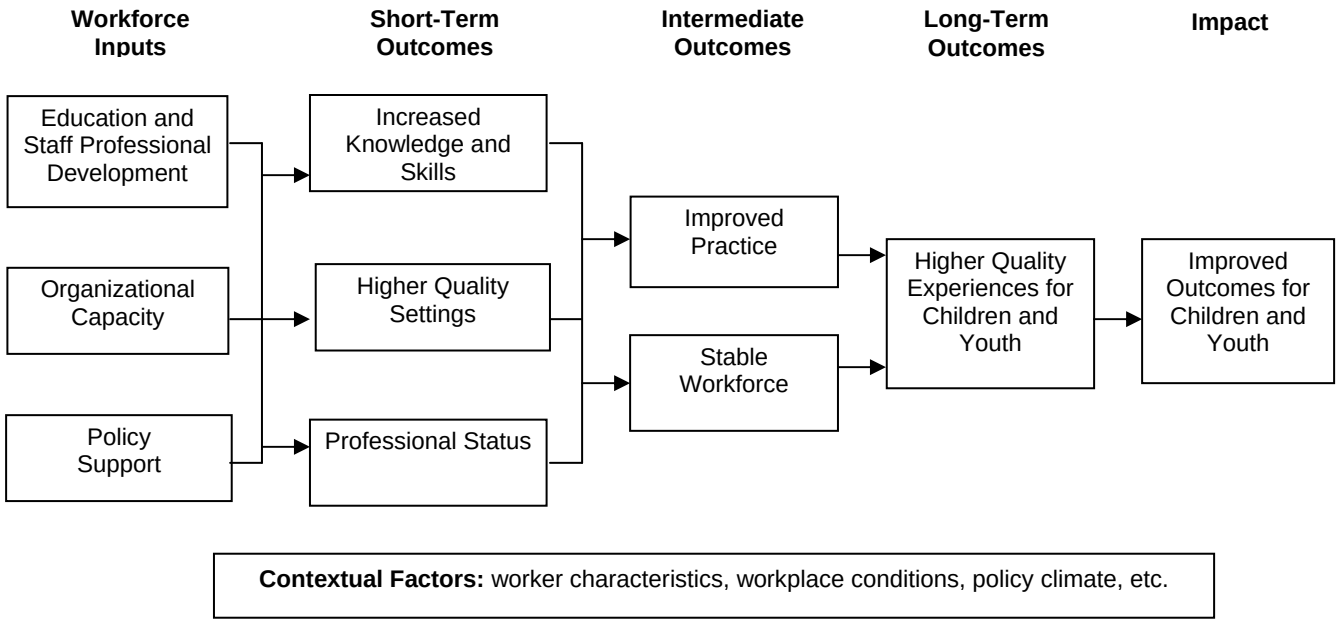
Sector at a Glance: The State of Youth Development Workforce Research

Investigations examining the relationship between key workforce inputs—professional staff development, organizational supports, and policy supports—and youth outcomes for the youth development workforce have been scarce. As a relatively nascent field, the preponderance of research has been focused on understanding results, rather than unpacking what contributes to those results. Further, the little research that has been conducted linking workforce inputs to youth outcomes is largely non-experimental and/or nested within larger studies about overall program quality. Studies examining workforce development in the youth development sector rely primarily on surveys, self-reporting, and observation. No single study exists that can illustrate the model in its entirety; the few studies that exist focus on one input and its related impacts.

Using the Model to Identify the Predominant Patterns in Relationships between Workforce Inputs and Outcomes

Despite differences in the nature and quality of the research across the four individual sectors, which lead to limitations in the current workforce development research base, three distinct patterns of relationships emerged with respect to the overall cross-sector research on the workforce and outcomes when we mapped the research onto the framework. The first pattern is research that examines how one of the three categories of workforce inputs affects short-, intermediate-, or long-term outcomes. The second pattern is research examining some combination of inputs and their relationships with outcomes. The final pattern is the examination of how some sets of outcomes impact each other. The logic model on page 12 below shows the framework and the seven pathways. Each of the three patterns has several specific pathways that have been examined across the model.

FIGURE 2: Logic Model of Workforce Development



PATTERN 1: Individual Workforce Inputs Impact Outcomes

→ Pathway 1: Education and staff professional development links to outcomes.

→ Pathway 2: Organizational capacity links to outcomes.

→ Pathway 3: Policy supports links to outcomes.

PATTERN 2: Combinations of Workforce Inputs Impact Outcomes

→ Pathway 4: Education and staff professional development and organizational capacity link to outcomes.

→ Pathway 5: Organizational capacity and policy support link to outcomes.

Pathway 6: All three inputs link to outcomes.

PATTERN 3: Outcomes Impact Each Other

→ Pathway 7: Outcomes link to other outcomes.

We describe the three patterns below, with examples of studies illustrating the pathways. We also lay out what we think the research about each pattern suggests for workforce support efforts, as well as future research. We present the results of the cross-sector analysis here. For readers interested in more detail for each of the four sectors, Appendix A contains the seminal studies for each pattern and pathway.

Pattern 1. Individual Workforce Inputs Impact Short-, Intermediate-, and Long-Term Outcomes. For example, in child welfare, studies indicate that a positive organizational climate provides caseworkers with the supports that result in positive child outcomes. In fact, most of the workforce development research that has been conducted has focused on single inputs. Of the three workforce inputs, the largest amount of research has been done in the area of staff professional development. While there is some research in the area of organizational supports, there is much less research on the connection of policy supports in the workforce to impacts on child and youth outcomes. Further, overall, the research questions are general (e.g., does more education or training increase the quality of the setting?), rather than specific (e.g., what amount and type of education, training, or certification for what particular groups of staff might achieve better outcomes for children or youth?). A few general statements about the link between a single input and outcomes can be made:

- ⇒ Studies on **professional staff development** demonstrate the complexity of relationships and different pathways from workforce to outcomes in the logic model. For example, the conversation about degree versus non-degree requirements needs to be realigned to focus on continuous learning from pre-service throughout a worker's career.
- ⇒ Studies on **organizational supports** suggest that providing frontline workers with leadership, supervision, manageable workloads, and a positive work climate can contribute to better child and youth outcomes.
- ⇒ Studies on **policy supports** suggest that worker incentives contribute to stability, job satisfaction, and performance.

Pattern 1: Single input studies

Professional Staff Development: A 2006 study of the High/Scope Foundation's youth-level participatory training model used primarily at school- and community-based afterschool programs examined pre-post surveys from 585 trainees attending over 990 person-days of training since 2002 (Smith, 2006). Examination of a subset of the 193 trainees who attended three specific youth-worker trainings revealed that participants in the High/Scope participatory training model self-reported significant ($p < .05$) gains in all areas of knowledge and skill development, including developmental theory, interaction strategies, participatory methods, and applications in service learning.

Organizational Capacity: Yoo and Brooks (2005) conducted a survey of caseworkers in Los Angeles County and examined administrative data on children's placement. They found that organizations where workers perceive more favorable conditions—such as more regular routines of work, strong leadership qualities, and supervisor and co-worker support—had fewer out-of-home placements than organizations that ranked low on these characteristics.

Policy Supports: In 2001 Texas approved approximately $10 million per year to provide salary supplements to juvenile justice workers, which amounted to $2,850 per full-time probation officer and $1,425 per full-time detention or correction officer (Texas Juvenile Probation Commission, 2003). A follow-up study conducted by the Texas Juvenile Probation Commission (2003) found a decrease in turnover of approximately one-half, from 15 percent and 31 percent in 1999 for probation officers and detention workers respectively, to 10 percent and 20 percent in 2002.

Pattern 2. Combinations of Workforce Inputs Impact Short-, Intermediate-, and Long-Term Outcomes. For example, early childhood studies have attempted to examine the inputs of teacher training and higher compensation rates, and their intermediate outcome on classroom quality. A few general observations can be made about this pattern of research:

- ⇒ When considering the combination of inputs, **most research to date has focused on the combination of professional staff development and organizational supports**. Further, it appears that this combination is likely to result in more positive outcomes for children than single inputs alone.
- ⇒ **Little research examines the outcomes associated with the combination of organizational and policy supports**.
- ⇒ The **research base on all three inputs together is virtually non-existent**. There are a few studies in early childhood and child welfare, but no comparable studies in youth development or juvenile justice.

Pattern 2: Combinations of Inputs

Professional Staff Development and Organizational Supports:
Then and Now: Changes in Child Care Staffing, 1994-2000 (Whitebook *et al.,* 2001) found that highly skilled teachers (BA-level or higher and with specialized training in early childhood) were more likely to leave the center if they earned lower wages, worked with fewer teachers with a four-year degree or higher, worked in centers with high turnover, and did not belong to a professional organization. The combination of organizational supports in the form of increased compensation and more professional settings, together with staff education, was associated with more stability in the workforce and higher quality settings.

Linking All Three Inputs:
Research on the Chicago Child-Parent Center program (Reynolds *et al.*, 2002), another program that combines all three inputs, has followed children to age 21. Participating children had lower rates of special education, less grade retention, fewer juvenile and violent arrests and higher rates of school completion than children who did not participate in the program.

Pattern 3. Short-, Intermediate, and Long-Term Outcomes Impact Each Other.

There are examples of research from all four human service sectors of research that demonstrate linkages among the outcomes, without directly examining any of the three inputs. In these cases, the inputs are either not considered at all, or, in the field of early childhood, are taken to be assumptions that no longer need testing. For example, some studies report the relationship between improved program quality and child outcomes, making an assumption that professional staff development was a necessary ingredient for program quality. Of the research that falls into this pattern, many of studies across sectors examine the relationship between quality settings and practices and a stable workforce to child and youth outcomes.

Pattern 3: Outcomes Impacting Each Other

A stable workforce leads to better outcomes.
A study of turnover in Milwaukee, of case mangers in private agencies contracted by the county to provide foster care and safety services, reported a relationship between a stable workforce and outcomes for children. Children who came into care for a 12-month period who had only one caseworker achieved permanency in 75 percent of the cases. As the number of case managers increased due to turnover, the percentage of children achieving permanency declined (Flower, McDonald and Sumski, 2005).

Improved skill leads to effective interventions.
A meta-analysis of 400 research studies of treatment interventions with juveniles conducted by Lipsey (1995) found a 10 percent lower recidivism rate for juveniles in treatment groups. The most effective interventions were those designed to improve social development skills, including interpersonal relations, self-control, school achievement, and specific job skills. Program effects were found to be consistently stronger for structured, behavioral, and/or skill-building interventions than for insight-oriented approaches such as casework, counseling, and group therapy (Howell and Lipsey, 2005).

The framework and our analysis of the research on the human service workforce and child and family outcomes are meant to serve as a springboard to more nuanced sector-specific models and theories of change that specify how characteristics and supports for the human service workforce affect child and youth outcomes. In our literature search, we found several examples of pathbreaking work with more nuanced ecological models in child welfare and juvenile justice as well as in education. We describe them here because they are instructive for researchers across sectors as they develop and test complex, multi-level intervention models with clear specification of constructs and multi-level analytic techniques, in order to understand how workforce interventions link to improved child and youth outcomes. These new models being tested link outcomes across the framework and focus on practice improvement through training and organizational support. The empirical results of several recent studies also suggest the promise of interventions that provide training and organizational supports because they can demonstrably improve practice and child and youth outcomes.

Yoo, Brooks and Patti at the School of Social Work at the University of Southern California (Yoo and Brooks, 2005; Yoo, Brooks and Patti, 2007) and Glisson, Hennelgarn, James, Dukes, Green and Schoenwald at the Children's Mental Health Services Research Center at the University of Tennessee (Glisson and Hemmelgarn, 1998; Glisson and Schoenwald, 2005) are developing complex models to examine how provider and organizational characteristics and processes affect client outcomes in child welfare and in juvenile justice. Robert Pianta and his colleagues at the Center for Advanced Study of Teaching and Learning at the University of Virginia similarly are developing and testing a system of pre- and in-service professional development and support for early childhood professionals and determining if it results in better outcomes for children in early elementary school (see textbox). As these and other researchers develop and test more nuanced intervention models, it will become clearer what works for whom under what circumstances.

My Teaching Partner in the Classroom (MTP-CLASS)

The Center for Advanced Study of Teaching and Learning at the University of Virginia is developing and evaluating a system of pre-service and in-service professional development and support called MyTeachingPartner (MTP). MTP has its basis in the Classroom Assessment Scoring System (CLASS) (Pianta *et al*., 2004), an across-grade/age system for observing classroom and teacher quality. The CLASS focuses on the interactions of teachers and children in the classroom, and in the CLASS-based MTP approach to professional development, the focus is on what teachers do with the materials they have and on their interactions with children as they implement a curriculum.

Evidence from several studies indicates that higher ratings on the dimensions assessed by the CLASS predict higher performance by children on standardized assessments of academic achievement and better social adjustment in the early grades of school. A new effort is expanding the CLASS to secondary settings and focusing on a small set of additional scales to explore the evidence that the CLASS measures aspects of teacher–child interaction that predict children's success later in school.

The MTP Approach

In the MTP conceptualization of professional development, teachers' training leads to improved child outcomes as a consequence of more effective teacher–child interactions. The MTP approach is not course- or workshop-based. Instead, MTP professional development resources offer individualized feedback and support to teachers focused on observation and analysis of each teacher's own classroom practices and interactions with children. In this approach, the CLASS observations provide a standard way of measuring and noting teachers' strengths and weaknesses and form the basis from which professional development can support teachers' high quality implementation and improve teacher–child interactions.

The CLASS and MTP are parts of a systematic and standardized observation of real classroom practice, in which professional development resources are targeted to those observations. They are currently being tested in several pre-service and in-service evaluation and training initiatives across the country (Pianta *et al.*, 2004).

Because of the national emphasis on improving student outcomes in education due to legislation such as the No Child Left Behind Act, there is a new emphasis on how to support the development and retention of highly qualified teachers. This is generating leading edge research and interventions that are worth examining for their implications for similar work in the human services. The Teacher Pathways Project (2005) with Teacher Policy Research has developed and is testing a complex ecological model of teacher preparation and pathways into teaching to address the question: What attributes of preparation pathways and ongoing development are most effective in improving student outcomes? The Teacher Pathways Project research is guided by an ecological model that includes all of the boxes in our framework. Specifically, their model includes measures of the characteristics of prospective teachers and of their preparation pathways; state and district policies and requirements; student and environmental (peers, family, and neighborhood) characteristics, and a set of school organizational and professional development supports that are hypothesized to affect the teacher workforce and student outcomes. A detailed description of their model and of their longitudinal study is available on the group's website (http://www.teacherpolicyresearch.org/TeacherPathwaysProject/tabid/150/D.)

The Center for Teaching Quality (Berry and Darling Hammond, with Hirsch, Robinson and Wise, 2006) is carrying out research on how working conditions such as school leadership, time for high quality professional development, and teacher empowerment, affect student achievement and teacher retention in conjunction with state efforts such as North Carolina Governor Easley's Teacher Working Conditions Initiative (www.teachingquality.org). The

results are being used for interventions to improve teaching conditions. There is another new strand of promising intervention research in education that focuses on directly improving practice based on data about children's performance and then on *in situ* professional development opportunities for teachers so that they can improve their practice (Boudett, City, and Murnane, 2005).

Alternatives to the one-shot workshop

Professional development workshops did little to change instructional practices in the classroom. [In the past], what worked were collaborative, effective methods of professional development for improving instructional practice and, in turn, student achievement. Teachers . . . worked together to develop a set of effective professional development practices, which embody principles of teacher ownership, accountability, and instructional consistency. Some steps:

Designing a personal professional development plan that still includes attendance at outside workshops, but in which teachers are responsible for applying learning in their classrooms and sharing information with their colleagues.

Induction of new staff via modules designed by lead teachers to provide consistency at the school level and to give new teachers a team of people, rather than just one mentor, to whom they can go for help.

Job-embedded collaborative coaching and learning in which teachers nominate their colleagues within the school to serve as coaches who conduct regular sessions that include preparation, an in-class demonstration, and a debriefing.

Exercising teacher leadership whereby teachers share their skills and knowledge with others by teaching district professional development courses, overseeing resident teachers, graduate interns, and student teachers, serving as a site for visits by other schools, and writing for a teacher audience.

Measuring Professional Development Efforts

Teachers receive training to understand and use student performance data to assess the performance of both individual students and entire grade levels. For example, when a cluster of teachers noticed low scores on a test item for reading comprehension, they looked to the one teacher whose students performed higher on that task and adopted her practices as their own across the grade level.

Learning walks and visual displays of student work. The principal can conduct daily "learning walks" through classrooms to observe instructional practices and give feedback to teachers. Convincing visual evidence of teacher learning and its subsequent impact on students is captured in the display of student work. Posting children's work makes teacher practice public and holds teachers accountable to colleagues, parents, and other community members.

District Policy Support

School- and district-level supports facilitate these professional development and assessment practices. District flexibility in how school funds are spent, permission to develop a school-based mentoring program in lieu of the district program, and a district commitment to professional development all aid professional development, as do whole school staffing and budgeting at the school level.

- Russo, 2005/06

Recommendations for Future Research, Demonstration, and Evaluation

Our review suggests that while a great deal of money is spent on professional development and other means of strengthening and supporting the human service workforce, remarkably little is known about if and how such expenditures result in better child and youth outcomes. At the same time, the demand to achieve better outcomes for human services and to show the value-added of workforce development efforts and expenditures continues to increase. This makes it a critical time for all the key stakeholders—including human service leaders and providers, those who provide workforce and professional development services, and researchers and evaluators—to take part in setting the future workforce development, research, and evaluation agenda. It is also clear that there are important and innovative workforce development efforts currently being tested and this highlights the importance of discussions among the stakeholders about how to insure that the resulting knowledge is used to improve workforce development efforts as well as human service training, practice, and outcomes.

A number of the efforts in the pipeline move well beyond the typical "one shot" professional development workshop to address the question: If one-shot workshops or training sessions don't work, what will? These newer efforts are testing more complex pathways across the theory of change with a variety of promising interventions involving sustained professional development and attention to the organizational and workforce policy factors that enable effective practices in order to determine if they result in better child and youth outcomes. The early childhood, child welfare, juvenile justice, and out-of-school time sectors are at different stages in testing approaches to workforce development that improve child and youth outcomes, and all are in early stages of the process. Again, this is a key time for broad stakeholder discussion of workforce research, development, and evaluation strategies.

We developed and used a preliminary logic model, based on a more ecological conception of how workforce inputs and processes influence outcomes, in order to organize existing research and evaluation and to stimulate stakeholders to create such models to guide their own work. The discipline of specifying a logic model forces clearer thinking about how inputs lead to outcomes and discussion of underlying theories of change and action.

We strongly recommend that those who develop and assess workforce development efforts articulate their models and theories of change.

Even if it is not possible to measure child and youth outcomes, the model and theory should make a plausible case for how the workforce development efforts could affect these outcomes. At the field level, future research on the relationship between workforce inputs and child and youth outcomes should be driven by conceptual models that recognize multiple inputs and a broad range of outcomes.

We found few studies that test an entire theory of change from inputs to outcomes. Instead, most examine a single input and a narrow range of outcomes. In child welfare and juvenile justice much of the focus has been on staff recruitment and retention while in early childhood it has centered on staff education, training, stability, and the quality of settings. Research about the youth development workforce has just gotten underway, and recent work has focused on staff credentialing and defining quality practice. There is also much research that examines the relationships among short- and longer-term outcomes without attention to inputs. This, as well as the work in the pipeline, suggests the importance of testing the whole theory and of recognizing that it is unlikely that there is a linear relationship between inputs

> Overall, intervention research in child welfare focuses primarily on main effects, which assumes that the interventions alone determine the outcomes and reveals little about for whom and under what conditions the intervention is most effective.
> - Yoo, Brooks, and Patti, 2007

and outcomes. As the evaluations of Functional Family Therapy and other workforce development interventions in the juvenile justice arena suggest, it is also likely that the variables will interact with each other in complex ways, some acting as mediators and others as moderators of the effects (Personal communication, Tom Lengyel, 2006).

We therefore recommend investment in studies designed to examine the complex relationships likely to exist among inputs and a variety of short-, intermediate- and long-term outcomes to determine if and how a multi-faceted approach to workforce development ultimately impacts children and youth.

Because so much of research and evaluation on workforce development stops at shorter-term or intermediate outcomes, such as improved staff stability or improvements in setting quality or practices, we underscore the importance of field investments in research that goes beyond effects on adults and organizations to focus on child and youth impacts. Such research is critical for identifying and targeting specific workforce development strategies for particular types of workers, organizations, and children and youth.

Strategies to Educate Public Child Welfare Workers

Recent targeted workforce improvements have sought to address caseload size and the child welfare staffing shortage by increasing the number of undergraduate and graduate social work students specially educated for public child welfare practice. These improvements occur primarily through university-agency partnerships that educate social workers with enhanced curricula, field education, and training. At present, about 40 states are involved in professional education partnerships, most supported by Title IV-E training funds, federal grants, and state funds.

Because minimum requirements for frontline child welfare staff vary from state to state, university–agency partnerships also differ. As these partnerships become more common, interest in documenting their outcomes continues to grow. Attention has begun to focus on understanding the linkages between social work education, workforce improvements, and the quality of child welfare practices.

Several states have embarked on multiyear university–agency partnerships to address the staffing crisis in child welfare. One such partnership is the Social Work Education Consortium. Launched five years ago, the Social Work Education Consortium partners the New York State Office of Children and Family Services, New York's 57 county commissioners, New York City's Administration for Children's Services, and the deans and directors of graduate and undergraduate social work education programs at public and private universities.

The partnership provides funding for child welfare staff to pursue graduate social work degrees. Studies are underway to assess the retention and promotion pathways of these graduates. In addition, a pilot project is underway with workers in the Temporary Assistance for Needy Families Unit (TANF) pursuing bachelor's degrees in social work. They will receive tuition support and upon graduation will be eligible for promotion into child welfare positions.

Meanwhile, seven regional groups are addressing local goals for workforce professionalization and stabilization. In two regions, examinations of how workers transfer and infuse new knowledge and skills from graduate social work programs and in-service training into their practice are underway.

- Zlotnik, McCarthy and Briar-Lawson, 2005/06

Much of the effort to support the human service workforce has centered on pre- and in-service staff development, and we recommend that this remain an area of emphasis but with particular attention to the issues laid out here. Research shows that there is significant variation in educational background, skills, and training among human service workers,

especially in early childhood and youth development, yet there are almost no studies of the type and amount of professional development needed to make a positive impact on children and youth.

We recommend that the stakeholders disaggregate and clearly specify what is meant by professional development, delineate research-based core competencies, and design research and evaluations to show how pre- and in-service education and specialized core competency training—including coaching, mentoring, and cycles of reflection on data keyed to professional development—affect practice and, ultimately, child and youth outcomes. We also recommend studies that examine if and how professional development in conjunction with promising organizational and policy supports (including increased compensation, wage scales, benefit improvements, and career ladders) affect child and youth outcomes.

Finally, organizational characteristics and processes—including leadership, supervision, and an emphasis on getting and using performance data for reflective practice and to guide ongoing professional development investments—increasingly appear to be critical in improving child and youth outcomes. This is apparent in all four human service sectors as well as in educational research.

We therefore recommend that some of the scarce resources for experimental and longitudinal research and evaluation be allocated to this area of knowledge development.

Professional Development Infrastructure to Develop Core Skills

People who work in afterschool have diverse prior experience and work in diverse settings. This makes "standardizing" professional development challenging. Until recently, training was mostly tailored to the particular program setting, but there is now a growing movement to build some consensus about a set of core skills that all afterschool workers should have.

Those skills can be strengthened or even built on the job through various means:

- **Coaching and on-site technical assistance.** Line staff can benefit from strong coaching and modeling within the program without attending off-site trainings. A strong orientation program and ongoing supervision can help ensure that the benefits of coaching are maintained over the long run.
- **Evidence of concrete change.** Initiatives in which programs receive grants that they can apply toward physical, tangible changes to their program environments, in addition to training and technical assistance, show increased staff buy-in to the program improvement effort.
- **Engagement of young people in staff development efforts.** The most successful training model is one that goes vertically up through the organization so that all program stakeholders, including youth, are engaged in the professional development process. Young people themselves should be asked what they would like in the program, and their answers used to shape professional development efforts.
- **An organizational mindset that values and supports professional development.** Successful administrators make a significant investment in the growth and development of their people and their program. Training and technical assistance alone will not contribute to continuous program improvement. Within a climate of teambuilding and shared decision-making, everyone should feel that they are making a positive difference for young people and their families.

- Little, 2005/06

Our review of the literature on workforce research and evaluation and our discussion with sector leaders point to the value of creating ongoing cross-sector as well as within-sector conversations about workforce development and outcomes, particularly at this early stage in the development of knowledge and understanding.

We recommend the creation of a community of practice (Wenger, McDermott and Synder, 2002) composed of key stakeholders (human service leaders, providers, professional development providers, and researchers and evaluators) from each of the four human sectors and representatives from educational research.

This community would work together over a three- to five-year period to compare and share logic models and theories of change; track key research, development, and evaluation work; and share research designs, measures, findings, and work experiences, thus insuring that the results of the work inform practice.

Efforts to cumulate and benefit from increasing investments in understanding the ways in which workforce investments lead to better child and youth outcomes are seriously hampered by several issues that such a community of practice could tackle. First, the lack of common definitions and measures of key worker, professional development, and organizational constructs and variables and the lack of agreement on ultimate child and youth outcomes within and across the human service sectors are formidable barriers to understanding what works and moves the needle on outcomes. Recognizing this, human service researchers are increasingly calling for more precise specification of organizational variables in child welfare research (Yoo and Brooks, 2005).

We strongly recommend within-sector discussions of ways to get more common definitions and measures as well as agreement on what child and youth outcomes should be tested. We believe that cross-sector discussion within a community of practice would greatly enrich the within-sector discussions.

Thomas Guskey on "Evidence" of Success

Many professional development leaders avoid systematic evaluations for fear that the evaluation won't yield "proof" that what they're doing leads to improvements in student learning, in which case funding may be withdrawn. Recognizing the distinction between "evidence" and "proof," however, can help resolve this dilemma.

To obtain proof—which means to show that professional development uniquely and alone leads to improvements in student learning—is very difficult. It requires a level of experimental rigor that is hard and often impossible to attain in practical school settings. But most policymakers, legislators, and school leaders are not asking for ironclad proof. What they want is evidence that things are getting better. They want to see improvements in assessment results or test scores, increased attendance, fewer discipline problems, or decreased dropout rates. Historically, professional development leaders haven't done a very good job of providing any such evidence.

Some experts suggest that when educators engage in professional development endeavors, results might not be evident for two or three years. But when teachers are experimenting with new approaches to instruction or a new curriculum, they need to gain evidence rapidly to show that it's making a difference. If they don't see such evidence, they quite naturally revert to the tried and true things they've done in the past. This isn't because they are afraid of change. Rather, it's because they are so committed to their students and fear that the new approach might lead to less positive results. In planning professional development, we must include some mechanism whereby those responsible for implementation can gain evidence of success from their students rather quickly—within the first month of implementation.

The importance of extended time for professional development and the need to ensure that activities are ongoing and job-embedded cannot be overstated.

- Kreider and Bouffard, 2005/06

A second issue is the development of strategies to allocate scarce research, development, and evaluation resources in ways that increase the likelihood of strengthening the workforce and improving child and youth outcomes.

We believe an investment strategy whereby costly experimental research and evaluations are saved (1) for testing the whole or key sections of the causal chain across the theory of change and (2) for more rigorous assessment of promising pilot and demonstration programs is appropriate and should be debated by the key stakeholders within and across sectors.

Substantial resources should be allocated to building the capacity of human service agencies to collect and use data for ongoing program improvement, a key component of which would include efforts to assess whether their workforce investments plausibly appear to contribute to improved child and youth outcomes.

Finally, we recommend more funding for evaluations that track the implementation and results of promising state and locally-developed workforce development efforts.

Those that are judged effective and scalable would in turn get resources for experimental tests to determine their contributions to improved child and family outcomes.

A third issue is the lack of a “best practices” clearinghouse or capacity to synthesize research and communicate back and forth from research to practice. As we carried out our literature search and review it was very clear that information about efforts to strengthen the human services workforce is scattered and not easily accessible.

There is a need to create an online clearinghouse that provides information about research and evidence-based practices as well as about promising innovations in the pipeline and being evaluated.

This clearinghouse could also establish a network to link policymakers, university faculty, researchers and practitioners so that they can communicate, problem solve, and learn from each other. This would be a relatively low-cost investment with potentially high yields.

A fourth issue follows from the growing practice and research-based understanding of the importance, the costs, and the complexity of strengthening the human services workforce in order to attain better child and youth outcomes. Recognition that “one shots” do not often change practice and that professional development alone without organizational and policy supports is inadequate must now stimulate an essential and difficult discussion about what resources are going to be necessary to truly strengthen the workforce. Research, development, and evaluation can help point the way, but they are also making it clear that there is not going to be a quick, cheap fix to strengthen the human service workforce. This is the nub of the difficulty: while claiming we want a functioning automobile, we are not willing to lay out enough money to purchase a unicycle. Our earlier discussion of the workforce issues and challenges across the four sectors points to the many obstacles and difficulties that workers face in building a career that is satisfying and successful, both personally and professionally, in the human services. These issues require organizational and policy solutions.

Therefore, a key part of the conversation must be discussion about building the public will to invest in the workforce in ways that enable it to deliver the quality services necessary for better child and youth outcomes.

References

Academy for Educational Development. (2002). "BEST Strengthens Youth Worker Practice: An Evaluation of Building Exemplary Systems for Training Youth Workers (BEST). A National Initiative of the National Training Institute for Community Youth Work." New York City: Academy for Educational Development, Center for School and Community Services.

Alarcon, F. (2002). "Programming, staffing, and managing the violent juvenile offender." In American Correctional Association, Ed., *Juvenile Justice Today: Essays on Programs and Policies,* Lanham, MD: American Correctional Association, 3-11.

American Public Human Services Association. (2005). *Report from the 2004 Child Welfare Workforce Survey: State agency findings*. Washington, DC: Author.

The Annie E. Casey Foundation. (2003). "The unsolved challenge of system reform: The condition of the frontline human services workforce." Baltimore, MD: Author. Available online at: www.aecf.org/initiatives/hswi/report_rev.pdf.

Antle, B., & Barbee, A. (2003a). *Training transfer: Variables that predict and maximize transfer*. Louisville, KY: National Resource Center on Child Welfare Training & Evaluation, Kent School of Social Work, University of Louisville.

Antle, B., & Barbee, A. (2003b). "The Impact of Training and Other Systemic Variables on CFSR Outcomes." Paper presented at the NASW Conference, "Workforce & Accountability: Child & Family Service Reviews Implications for Child Welfare Practice," Washington, DC.

Barnett, W.S. (2005). "Preschool education: A concept whose time has come." *Principal- Early Childhood, 85* (1):14-18.

Bellm, D., Burton, A., Whitebook, M., Broatch, L., and Young, M. (2002). *Inside the pre-k classroom: A study of staffing and stability in state-funded prekindergarten programs*. Washington, DC: Center for the Child Care Workforce.

Berry, B. and Darling-Hammond, L., Hirsch, E., Robinson, S., and Wise, A. (2006). *No Child Left Behind and the "highly qualified" teacher: The promise and the possibilities*. Hillsborough, NC: Center for Teaching Quality.

Birmingham, J., Pechman, E. M., Russell, C. A., & Mielke, M. (2005). *Shared features of high-performing after-school programs: A follow-up to the TASC evaluation*. Washington, DC: Policy Studies.

Boyd, D., Grossman, P., Lankford, H., Loeb, S., and Wyckoff, J. (2005). "How changes in entry requirements alter the teacher workforce and affect student achievement." Albany, NY: SUNY Teacher Policy Research.

Boudett, K.P., City, E., and Murnane, R., Eds. (2005). *Data Wise: A Step-by-Step Guide to Using Assessment Results to Improve Teaching and Learning*. Cambridge, MA: HEP/Harvard Education Publishing Group.

Bureau of Labor Statistics, U.S. Department of Labor. (2006). *Occupational outlook handbook, 2006–07 edition—Correctional officers.* Available online at: www.bls.gov/oco/ocos156.htm.

Dickinson, N. S., & Perry, R. E. (2002). Factors influencing the retention of specially educated public child welfare workers. In K. Briar-Lawson & J. L. Zlotnick, Eds., *Evaluation Research in Child Welfare: Improving Outcomes Through University-Public Agency Partnerships*. New York & London: The Haworth Press, Inc.

Early, D., Barbarin, O., Bryant, D., Burchinal, M., Chang, F., Clifford, D., Crawford, G., Weaver, W., Howes, C., Ritchie, S., Kraft-Sayre, M., Pianta, R., & Barnett, W.S. (May 2005). *Pre-kindergarten in eleven states: NCEDL's multi-state study of pre-kindergarten & study of state-wide early educations programs (SWEEP).* NCEDL Working Paper. University of North Carolina-Chapel Hill. Available online at: www.fpg.unc.edu/~ncedl/pdfs/SWEEP.MS_summary_final.pdf.

Ellett. A.J. ,Ellett, C.D., and Rugutt, J.K. (2003). *A study of personal and organizational factors contributing to employee retention and turnover in child welfare in Georgia*. Executive summary. Available online at: www.uky.edu/SocialWork/cswe/.

Florida Office of Program Policy Analysis and Government Accountability (2005, September). Report No. 05-46. *Qualifications, screening, salaries, and training affect quality and turnover of juvenile justice employees*.

Flower, C., McDonald, J., and Sumski, M. (2005). *Review of turnover in Milwaukee County private agency child welfare ongoing case management staff*. Available online at: www.uky.edu/SocialWork/cswe/documents/turnoverstudy.pdf.

Fox, S. R., Miller, V. P., & Barbee, A.P. (2003). "Finding and keeping child welfare workers: Effective use of training and professional development." *Human Behavior in the Social Environment*, 7 (1/2): 67-81.

Gansle, K. A., & Ellett, A. J. (2002). "Child welfare knowledge transmission, practitioner retention, and university-community impact: A study of Title IV-E child welfare training." In K. Briar-Lawson & J. L. Zlotnick, Eds., *Evaluation Research in Child Welfare: Improving Outcomes Through University-Public Agency Partnerships*, New York & London: The Haworth Press, Inc., 69-88.

Glisson, C., Dukes, D., and Green, P. (2006). "The effects of the ARC organizational intervention on caseworker turnover, climate, and culture in children's service systems." *Child Abuse & Neglect, 30* (8): 855-880.

Glisson, C. and Hemmelgarn, A. (1998). "The effects of organizational climate and interorganizational coordination on the quality and outcomes of children's service systems." *Child Abuse & Neglect, 22* (5): 401-421.

Glisson, C. and Schoenwald, S. (2005). "The ARC organizational and community intervention strategy for implementing evidence-based children's mental health treatments." *Mental Health Services Research, 7* (4): 243-259.

Greenhalgh, T., Robert, G., MacFarlane, F., Bate, P., and Kyriakdou, O., (2004). "Diffusion of innovations in service organizations: systematic review and recommendations." *The Milbank Quarterly, 82* (4)*:* 581-629.

Hall, A.H . & Cassidy, D.J. (2002). “An Assessment of the North Carolina School-Age Child Care Accreditation Initiative.” *Journal of Research in Childhood Education, 17*(1): 84-96.

Harvard Family Research Project, (2005/06, Winter). *The Evaluation Exchange: Professional Development, XI* (4). Cambridge, MA: Author. Available online at: www.gse.harvard.edu/hfrp/content/eval/issue32/winter2005-2006.pdf.

Hirsch, E. (2005). “Teacher Working Conditions are Student Learning Conditions: A Report to Governor Mike Easley on the 2004 North Carolina Teacher Working Conditions Survey.” Chapel Hill, NC: Southeast Center for Teaching Quality (SECTQ).

Howell, J. C. and Lipsey, M.W. (2005). “A practical approach to evaluating and improving juvenile justice programs.” *Juvenile and Family Court Journal, 55* (1): 35-48.

Johnson, K., Caskey, R. & Wagner, D. (2002a). *Evaluation of Michigan’s foster care structured decision making case management system*. Madison, WI: Children’s Research Center.

Johnson, K., Caskey, R. & Wagner, D. (2002b). Addendum to the evaluation of Michigan’s foster care structured decision making case management system. Madison, WI: Children’s Research Center.

Killion, J. (2005/06, Winter). “Evaluating the impact of professional development in eight steps.” *The Evaluation Exchange: Professional Development, XI* (4): 5. Cambridge, MA: Harvard Family Research Project.

Kreider, H. and Bouffard, S. (2005/2006, Winter). “A Conversation with Thomas Guskey.” *The Evaluation Exchange: Professional Development, XI* (4): 12-15. Cambridge, MA: Harvard Family Research Project.

Leiber, M.J., Schwarze, K., Mack, K., and Farnworth, M. (2002). “The Effects of Occupation and Education on Punitive Orientations among Juvenile Justice Personnel.” *Journal of Criminal Justice,* 20: 303-316.

Light, P. (2003). *The health of the human services workforce*. Washington, DC: Center for Public Service, the Brookings Institution and the Wagner School of Public Service, New York University.

Lipsey, M. W. (1995). “What Do We Learn from 400 Research Studies on the Effectiveness of Treatment with Juvenile Delinquents?” In J. McGuire, Ed., *What Works: Reducing Reoffending—Guidelines from Research and Practice*. Hoboken, NJ: John Wiley and Sons, 63-78.

Little, P. (2005/06 Winter). “Who is the after school workforce?” *The Evaluation Exchange: Professional Development XI,* (4): 16. Cambridge, MA: Harvard Family Research Project.

Martin, M., Barbee, A., & Antle, B. (2003). *Child and Family Service Reviews (CFSRs): Preliminary results and implications for training*. Louisville, KY: National Resource Center on Child Welfare Training & Evaluation, Kent School of Social Work, University of Louisville.

Martinez-Beck, I. and Zaslow, M. (2006). “The context for critical issues in early childhood professional development.” In M. Zaslow and I. Martinez-Beck, Eds., *Critical Issues in Early Childhood Professional Development*. Baltimore: Paul H. Brookes Publishing.

Maryland Juvenile Justice Coalition. (2002). *Principles of a Model Juvenile Justice System*. Baltimore, MD: Author.

McCabe, L. & Cochran, M. (2006). "The New York State School Age Care Credential: Evaluation Findings and Lessons Learned." Cornell Early Childhood Program, Department of Human Development. Research brief under development.

McCurty, S.L., Rose, S.J., Reitz, A.L., et al. (2005). "Workforce Recruitment and Retention in the Bureau of Milwaukee Child Welfare: Results from staff surveys and focus groups." Madison: Department of Health and Family Services, Division of Children and Family Services. Available online at: http://dhfs.wisconsin.gov/bmcw/progserv/Initiatives/workforcepdf/UWM-CWLA%20report-final%20version.pdf.

Mendel, R. A. (2000). *Less hype, more help: Reducing juvenile crime, what works—and what doesn't*. Washington, DC: American Youth Policy Forum.

Miles, M. (2006). "Good Stories Aren't Enough: Becoming Outcomes Driven in Workforce Development." *Working Ventures*. Public/Private Ventures. Philadelphia, PA. Available online at: www.ppv.org/publications/assets/203_publication.pdf.

National Afterschool Association. (2006). "Understanding the afterschool workforce: Opportunities and challenges for an emerging profession." Houston: Cornerstones for Kids. Available online at: www.cornerstones4kids.org/new_reports.htm#anchor2.

National Council on Crime and Delinquency. (2006a). "Exploring the Effect of Juvenile Justice System Functioning and Employee Turnover on Recidivism Rates." Houston: Cornerstones for Kids. Available online at www.cornerstones4kids.org/new_reports.htm#anchor2.

National Council on Crime and Delinquency. (2006b). "Job Turnover in Child Welfare and Juvenile Justice: The Voices of Former Frontline Workers." Houston: Cornerstones for Kids. Available online at" www.cornerstones4kids.org/new_reports.htm#anchor2.

Okamura, A. & Jones, L. (2000). "Re-professionalizing child welfare: An evaluation of a IV-E training program." *Research in Social Work Practice*, 10: 607-621.

Pianta, R. C., La Paro, K. M., and Hamre, B. (2004). *Classroom Assessment Scoring System (CLASS)*. Unpublished.

Robin, S. C., & Hollister, C. D. (2002). "Career paths and contributions of four cohorts of IV-E funded MSW child welfare graduates." In K. Briar-Lawson & J. L. Zlotnick, Eds., *Evaluation Research in Child Welfare: Improving Outcomes Through University-Public Agency Partnerships*. New York & London: The Haworth Press, Inc., 53-67.

Russo, Mary (2005/06 Winter). "Teacher professional development: How do we establish it and know that it's working?" *The Evaluation Exchange: Professional Development, XI* (4): 6. Cambridge, MA: Harvard Family Research Project.

Reynolds, A.J., Temple, J.A., Robertson, D.L., and Mann, E.A. (2002). "Age 21 cost-benefit analysis of the Title I Chicago Child-Parent Centers*." Educational Evaluation, 24* (4): 267-303.

Scannapieco, M. & Connell-Carrick, K. (2003). "Do collaborations with schools of social work make a difference for the field of child welfare? Practice, retention and curriculum." *Journal of Human Behavior in the Social Environment*, 7 (1/2): 35-51.

Shelden, Randall G. (1999). “Detention Diversion Advocacy: An Evaluation.” Washington, DC: DOJ, OJP, OJJDP.

Smith, C. (2006). “Evidence of effectiveness for training in the High/Scope participatory learning approach.” Ypsilanti, MI: High/Scope Educational Research Foundation.

Steward, M.D. and Andrade, A. (2004). “The Missouri Division of Youth Services’ Innovative Approach to Juvenile Corrections Staffing.” *Corrections Today,* Aug. 2004: 100-103.

The Teacher Pathways Project (2005*). Examining Teacher Preparation: Does the Pathway Make a Difference?* Albany, NY: SUNY Teacher Policy Research Available online at: www.teacherpolicyresearch.org/portals/1/pdfs/Examining_Teacher_Preparation_Full_Description.pdf.

Texas Juvenile Probation Commission, Research and Planning Division (February 2003). *A Follow-Up Study: Turnover Rates of Juvenile Probation Department Personnel in Texas, Fiscal Year 2002.*

United States General Accounting Office (2003). *Child Welfare: HHS could play a greater role in helping child welfare agencies recruit and retain staff*. GAO-03-357. Washington DC: GAO.

Wenger, E., McDermott, R., and Snyder, W.M. (2002). *Cultivating communities of practice: A guide to managing knowledge*. Boston, MA: Harvard Business School Press.

Whitebook, M., Sakai, L., Gerber, E., and Howes, C. (2001). *Then and now: Changes in child care staffing, 1994-2000*. Washington, DC and Berkeley, CA: Center for the Child Care Workforce and Institute of Industrial Relations, University of California.

Yoo, J. and Brooks, D. (2005). “The role of organizational variables in predicting service effectiveness: An analysis of a multilevel model.” *Research on Social Work Practice, 15* (4): 267-277.

Yoo, J., Brooks, D. and Patti, R. (2007). “Organizational constructs as predictors of effectiveness in child welfare interventions.” *Child Welfare, 86* (1):53-78.

Zlotnik, J.L., DePanfilis, D., Daining, C. and Lane, M.M. (2005). “Factors influencing retention of child welfare staff: A systematic review of research.” Washington D.C.: Institute for the Advancement of Social Work Research.

Zlotnik, J.L., McCarthy, M., and Briar-Lawson, K. (2005/06 Winter). “Key strategies to educate public child welfare workers and improve child welfare systems.” *The Evaluation Exchange: Professional Development, XI* (4): 6. Cambridge, MA: Harvard Family Research Project.